

South Dakota Climate & Drought Summary

July 11, 2016

Laura Edwards
SDSU Extension Acting State Climatologist

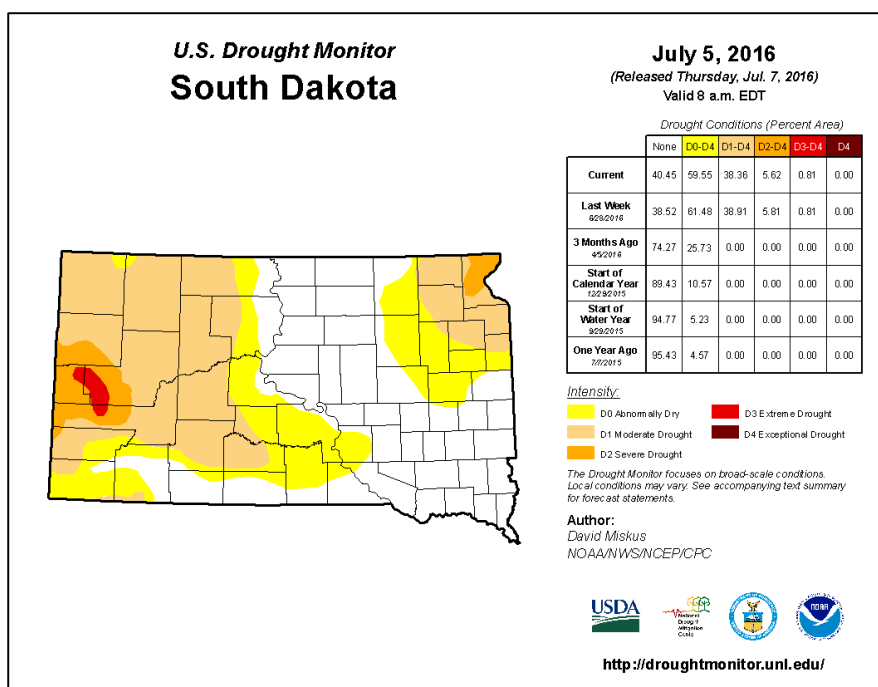
U.S. Drought Monitor

As of July 5, 2016, the U.S. Drought Monitor shows over 38% of South Dakota in drought, in D1 (Moderate) or worse. About 4% of the state is in Severe drought, and just under 1% in Extreme drought. There was very little change from the previous week's map.

7-day Summary

Overall, the week was dry in the west and turned wet in the east. Temperatures for the week were near average across the state as the week started off cool and gradually warmed up to 90+ degrees over the weekend. The week overall had some locations reporting about 2 to 4 degrees cooler than average in the east. A couple of far western locations were about 2 to 4 degrees warmer than average.

Little precipitation fell in the western counties this week, including 7-day totals less than ½ an inch in the southwest and south central regions. The northeastern part of the state received some much needed rain over the last couple of days, as reports are still coming in Monday morning. This will provide some short-term relief. In Corson and Campbell counties, some single-day totals were over 4 inches. In the far northeast, where drought has been in place all season, 6 to 8 inches of rain were reported as of Monday morning. Across the northeast, weekly totals of two inches or more were common. This much needed rain has ended a dry streak that lasted over two weeks in many of the northern tier counties.



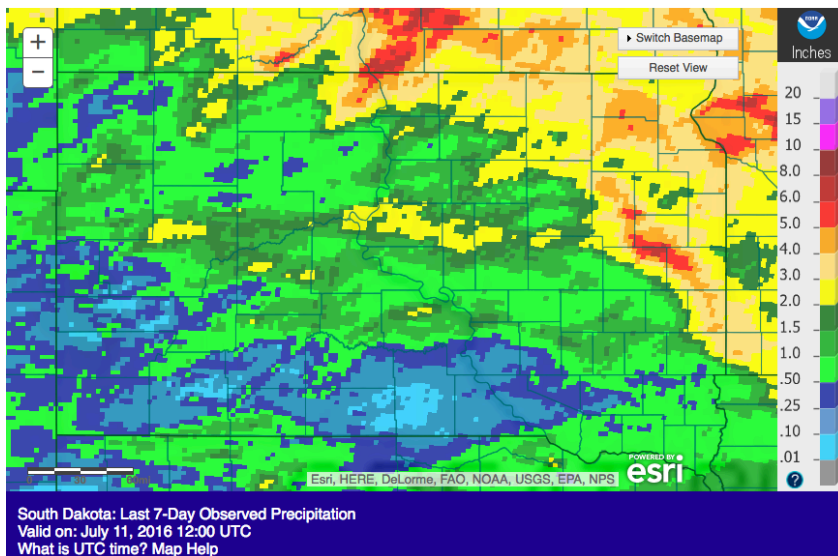


Figure: Radar-estimated rainfall for South Dakota, July 5-July 11. Source: <http://water.weather.gov/precip>

Impacts

Low humidity, warm temperatures and moderate to high wind speeds increased fire danger. Several small fires were reported over the July 9-10 weekend. Red flag warnings and extreme fire danger remain in place across the west as of this writing. The potential for significant wildland fire remains high through July for the western third of the state.

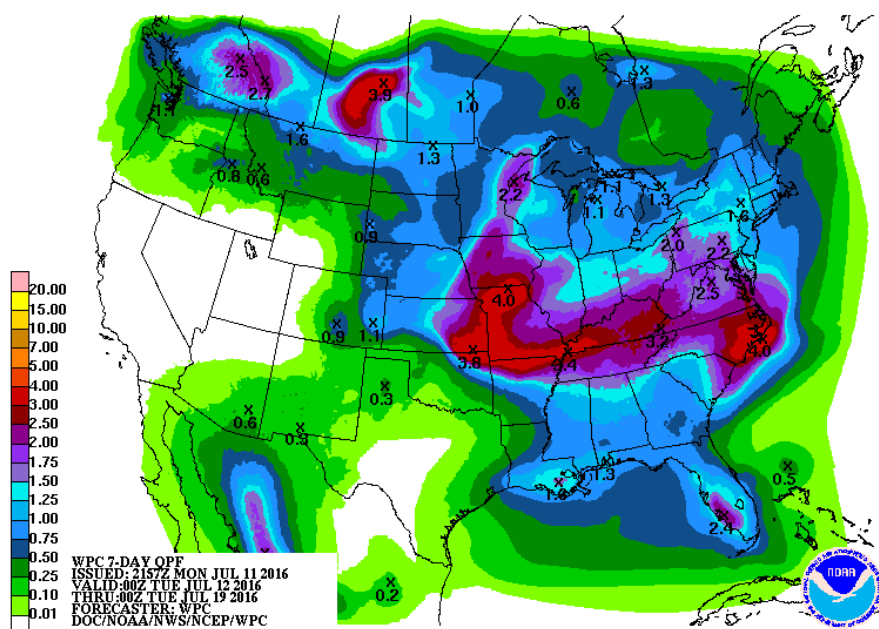
Agricultural areas continue to experience drought or pre-drought conditions across most of the state. Drought impacts that have been reported recently include:

- Use of irrigation to minimize drought impacts in row crops;
- Dryland alfalfa in the northwest is worst since 1988;
- Increased requests for water quality sampling for livestock and reports of algae blooms;
- Hay baling, straw, and combine fires.

Forecast

As the heavy rain of Sunday and Monday moves east and away from South Dakota, drier conditions will settle in mid-week. Starting Thursday, a more active weather pattern will move across the region. Some chances of rain are forecast on and off from the Black Hills and across to the eastern side of the state for the weekend. Total rainfall amounts are not expected to be very significant, however, with less than an inch total forecast for the week. This pattern will be short-

lived as a drier pattern is projected to settle in early next week.



Temperatures will be relatively mild for the next couple of days, near the seasonal averages. Over the weekend, temperatures will likely begin to climb and will bring warmer than average temperatures to South Dakota next week.

As temperatures rise and dryness takes over next week, drought conditions and extreme fire danger can resurface quickly despite the recent rains.

Figure: 7-day total precipitation forecast valid for July 11-July 18. Source: NOAA National Weather Service, Weather Prediction Center, <http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml>